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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/679,156 | 10/03/2003 | Frederick H. Grenning | 5320/55488 | 3953 |
| 7590 04/14/2006 Gerhardt Gomez & Haskins, LLP 730 W. Randolph St. 3rd Floor Chicago, IL 60661 | | | EXAMINER SAVAGE, MATTHEW O | |
| | | | ART UNIT 1724 | PAPER NUMBER |

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,156

Applicant(s)

GRENNING, FREDERICK H.

Examiner

Matthew O. Savage

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1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 17, and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure enabling the reservoir to be removable as recited in claims 3, 4, and 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The amendment filed 8-10-05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material

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which is not supported by the original disclosure is as follows: the removable access cap 325 added to FIG. 1 and 325a added to FIG. 4 is new matter; the limitations relating to the access cap added to page 16 of the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 4, and 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to adequately disclose the structure for enabling the agent mixing chamber to be removable.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wiedrich et al.

With respect to claim 1, Wiedrich et al disclose a method of dechlorinating fluid comprising the steps of: connecting a by-pass integrated dechlorination device to a fluid flow source (e.g., by providing a bypass line of a main liquid flow as described from line 66 of col. 7 to line 2 of col. 8, and lines 31-42 of col. 9), flowing fluid through a dechlorination device F (see FIG. 1 and lines 14-30 of col. 9, especially lines 23-24) along a flow path (e.g., the main flow path, see lines 31-45 of col. 9); diverting a proportion of the fluid through a bypass in the dechlorination device; the exposing the proportion to a dechlorination agent in the bypass; and merging the proportion of the fluid back into the fluid flow path.

As to claim 2, Wiedrich et al disclose the step controlling the amount of fluid diverted through the bypass via a valve (see from line 66 of col. 7 to line 2 of col. 8).

Regarding claim 3, Wiedrich et al disclose the dechlorination agent as being contained in a removable agent mixing chamber 10 in the bypass.

As to claim 4, Wiedrich et al disclose the removable mixing chamber as being removable from the dechlorination device without removing the dechlorination device from the fluid flow path (e.g., by removing the reservoir while leaving the other parts of the bypass circuit intact).

With respect to claim 5, Wiedrich et al disclose a device F for dechlorinating fluid, comprising: a flow tube (e.g., the main flow line conduit described on lines 31-45 of col. 9), a bypass in fluid communication with the flow tube (see line 37 of col. 9), wherein the

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bypass diverts a proportion of the fluid from the flow tube to the bypass, and a dechlorination agent reservoir 10 in the bypass.

As to claim 6, Wiedrich et al disclose a control valve regulating the proportion of the fluid entering said bypass (see from line 66 of col. 7 to line 2 of col. 8).

Concerning claim 7, Wiedrich et al disclose the dechlorination agent reservoir as including an agent mixing chamber 8 (see FIG. 1).

Regarding claim 8, Wiedrich et al disclose the dechlorination agent mixing chamber as being selectively removable from the dechlorination device without removing the dechlorination device from said fluid path (e.g., by cutting adjacent portions of the bypass circuit adjacent the inlet and outlet of the reservoir while leaving the other parts of the bypass circuit intact).

Concerning claim 9, Wiedrich et al disclose the agent mixing chamber as including a dechlorination agent (see lines 23-26 of col. 9).

As to claim 10, Wiedrich et al disclose the control valve as controlling the amount of the dechlorination agent added to the fluid (see from line 66 of col. 7 to line 19 of col. 9).

With respect to claim 11, Wiedrich et al disclose the by-pass as including an inlet tube and an outlet tube (e.g., defined by the piping mentioned on lines 36-42 of col. 9).

Regarding claim 17, Wiedrich et al disclose a first dechlorinating agent connecting tube 40 and a second dechlorinating agent connecting tube 34, the first dechlorinating agent connecting the inlet tube to the dechlorinating agent reservoir and

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the second dechlorinating agent connecting tube connects the outlet tube to the dechlorinating agent reservoir.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedrich et al in view of Heany.

With respect to claims 12 and 13, Wiedrich et al fail to specify the details of the inlet and outlet tubes. Heany disclose an analogous apparatus including an inlet tube e angled toward the direction of fluid flow through a flow tube C and an outlet tube e¹ angled away from the direction of fluid flow through the flow tube (e.g., since it is perpendicular to the direction of flow) and suggests that such an arrangement encourages flow into and through the reservoir D. It would have been obvious to have modified the apparatus of Wiedrich et al so as to have included the details of the inlet and outlet tubes as suggested by Heany in order to encourage flow into and out of the reservoir.

With respect to claim 19, Wiedrich et al disclose a second connecting tube formed of hard piping mounted to the reservoir (see lines 59-61 of col. 10) but fails to

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specify the first connecting tube as being formed of hard piping. Heany discloses that is known to form a first and second connecting tubes e, e¹ of hard piping (e.g., since the tubes are made of metal, see the cross hatching in FIG. 2) and suggests that such an arrangement facilitates connection of the reservoir d to the flow tube C in cases where the reservoir and flow tube were in close proximity to each other by enabling the use of gland fittings d, g. It would have been obvious to have modified the apparatus of Wiedrich et al so as to have included first and second dechlorinating agent connecting tubes are made of hard piping mounted to said dechlorinating agent reservoir in order to facilitate connection of the flow tube to the reservoir.

Applicant's arguments filed 8-10-05 have been fully considered but they are not persuasive.

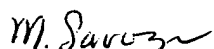
With respect to applicant's argument against the rejection of claim 1 under 35 U.S.C. 102(b) over Wiedrich et al, applicant's argument that the instant invention operates under the principle of differential pressure providing balanced, turbulent flow whereas the invention of Wiedrich et al does not fails to apply since no such limitations have been included in instant claim. Furthermore, the method of Wiedrech et al operates under the argued principle since no flow through the agent mixing chamber would occur without a pressure differential between the inlet and outlet of the mixing chamber. Additionally, the flow provided by Wiedrich et al appears to be balanced since a grid is provided in the agent mixing chamber to evenly distribute dissolving liquid to the chemical agent. Additionally, modification of the method of Wiedrich et al to include

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turbulent flow would have been obvious in order to provide the desired flow rate for a particular application since the flow is adjustable (see lines 13-16 of col. 8). Applicant's argument that the relief valve of Wiedrich et al is used to control the level of liquid in the agent mixing chamber is not correct (see lines 40-43 of col. 7) since the reference teaches that the liquid level in the mixing chamber is controlled by rate delivery of dissolving liquid into the agent mixing chamber (see lines 13-16 of col. 7). Finally, applicant's argued principles lack basis in the original disclosure and would be considered new matter if subsequently added to the instant specification and claims.

Applicant argues that Wiedrich et al fail to disclose a flow tube as specified in instant claim 5, however, Wiedrich et al clearly specifies a flow tube in the form of a "conduit" (see lines 36-39 of col. 9). Applicant also argues that Wiedrich et al fail to disclose a device that is quickly hooked into a piping or hose system, however, such an argument fails to apply since no structure for enabling such a function has been recited in instant claim 5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.


Matthew O Savage
Primary Examiner
Art Unit 1724

mos
April 13, 2006